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Network Interfaces

- Galaxy
- Introduction
- Modbus
- TCP/IP (www, mail)
- TCP/IP (Modbus)
- EIB
- Metasys
- Modbus
- RS232/RS485
- Custom
- AnyBus-S
- Other
- Wireless

Ethernet Gateways

- NetBiter™ Platform
- Serial Server
- Modbus RTU - TCP

Serial Gateways

- LonWorks Modbus
- Modbus TCP
- Ethernet/IP Rockwell
- Profibus
- Custom

LonWorks (Lite)
Metasys (Lite)
Serial Platform (Lite)

GSM / Modem

GSM
Analog modems
LonWorks Modem

Windows / Java Tools

Plugins
Java Applets
WebDesign

Training

Training

Galaxy

Introduction

The Galaxy concept is an embedded OEM communication module that acts as a communication interface between a fieldbus network and an automation product such as energy meters, ventilation devices, motor drives etc.

The basic features of the Galaxy modules are:

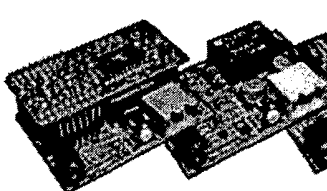
- Low cost
- Fast to implement (short time to market)
- Easy-to-use
- Small size



All communication modules have the same interface to the device / product with which they are designed to work on the "product side" is basically a one time hardware job.

The concept supports:

- LonWorks
- TCP/IP (web server, email etc)
- TCP/IP Modbus TCP
- EIB
- Metasys (available in Q4)
- Modbus (available in Q4)
- RS232/RS485 (available in Q4)



Other networks can be developed on request.

Interface between the communication module and the device (product)

The interface is the same on all communication modules regarding electrical and mechanical specifications. The software protocol can be implemented according to specific application.

Software interface

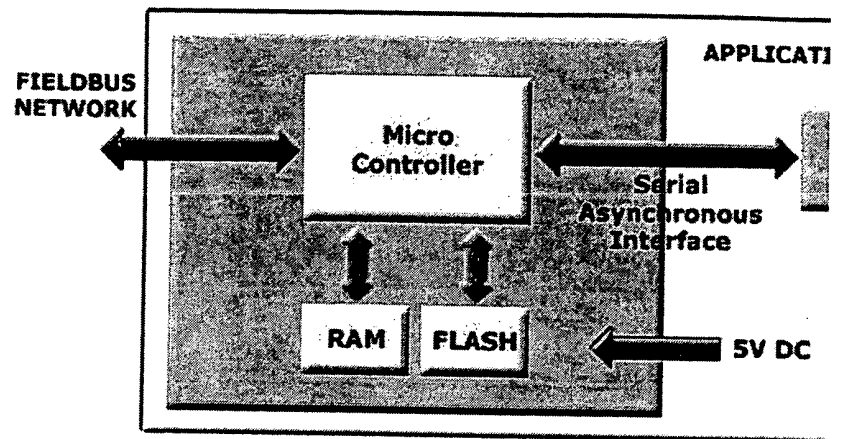
A software protocol can be implemented in the communication module according to specific demands of the application and will be done to support the required interface.

Physical interface

The connector between the communication module and the device has 10 pins. The module exchanges data to the microprocessor on the device through a 3 pins interface.

The communication module is powered through the host device through the 5V (5V, GND). The rest of the pins are dedicated to functions such as LEDs, fieldbus functions etc.

See picture below:



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User's Guide Size: 1000 KB - Format: PDF

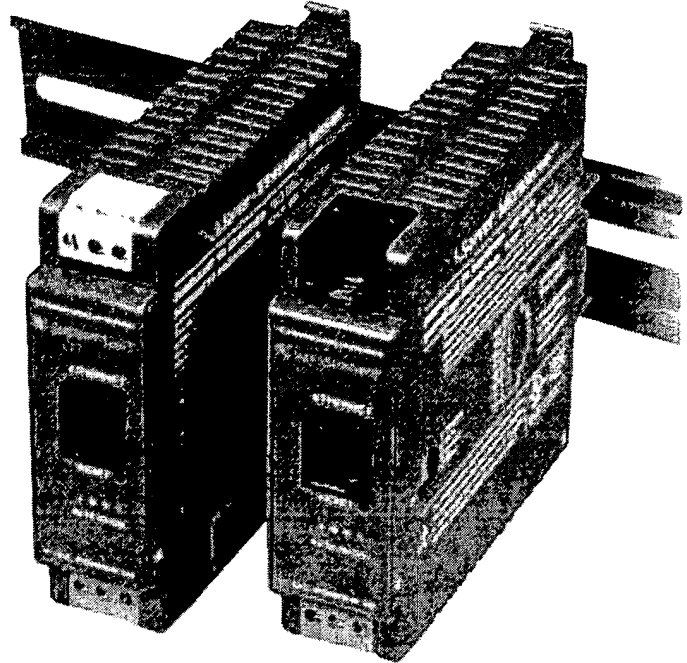
iServer Industrial MicroServer™

EIS-2

- ✓ Connects industrial serial devices with RS-232, RS-485, or RS-422 to an Ethernet network and the Internet
- ✓ Replaces dedicated wiring and PC's for serial connections
- ✓ Digital input/output lines
- ✓ Well-developed TCP/IP Stack
- ✓ Web based interface for easy configuration and access without any special software
- ✓ Configuration option via Telnet and Serial
- ✓ Supports TCP, UDP, ARP, Telnet, DHCP, DNS, HTTP, and MODBUS protocols
- ✓ Includes COM port redirection software to redirect data destined for serial COM port to the Ethernet port on a PC
- ✓ Password protection for Security
- ✓ Snaps easily into DIN Rail mounting rack
- ✓ Firmware upgradeable
- ✓ Custom firmware and private labeling for OEM's
- ✓ OEM board-level iServer available



FCC-B



The award-winning NEWPORT® iServer is the simplest, easiest, most economical way to connect serial devices to an Ethernet network and the Internet.

When you type its name in a Web Browser, it serves Web pages that let you quickly and easily configure the device for your specific application without any special software.

Getting started with the iServer is very simple and easy because it can take a dynamically assigned IP address from a DHCP server on your network. This DHCP client capability is a valuable and unique feature of the NEWPORT iServer that makes it extremely easy and simple to start using this device on almost any Ethernet network.

You can easily assign a static IP address to the iServer instead of a dynamic one, if necessary. The IP address can be assigned locally through its serial connection, as well as remotely over an Ethernet network via Telnet or a web browser, using its factory default IP address.

The NEWPORT iServer connects to an Ethernet Network with a standard RJ45 connector. Serial devices connect to screw terminals on removable connectors. You can select RS-232, or RS-485 (and RS-422) Serial Communications from the configuration Web page.

The iServer can be used to make an existing Serial device a "node" on an Ethernet network with a unique IP address that's accessible from any authorized computer on the LAN, WAN, or Internet.

The iServer can instead be used to create a virtual tunnel on an Ethernet/Internet network simulating a local point-to-point serial connection between a serial device and a PC.

This replaces dedicated point-to-point wiring limited to 50 feet on an RS-232 connection. The NEWPORT iServer packages the Serial data in standard TCP/IP packets that can travel anywhere on the Ethernet LAN or over the Internet.

The NEWPORT iServer is compatible with almost any device with a Serial interface such as: time clocks, security alarms, card-key access controllers, telecommunications equipment, vending machines, bar code readers, electric power meters, UPS systems, test & measurement instrumentation, PLC's, serial printers, cash registers, and many more.

You do not need to rewrite the firmware for your serial devices to work with the iServer, and in some cases might not need to change your application software. Your serial devices will function over the Ethernet network or the Internet as if they were connected directly to a PC. The COM port on the iServer simulates a local COM port on the PC.

The NEWPORT iServer is compatible with wireless Ethernet. In settings where wires of any kind are not possible, the EIS-2 can be connected to a Wireless Ethernet Access Point enabling simple, economical Wireless connectivity of Serial Devices.

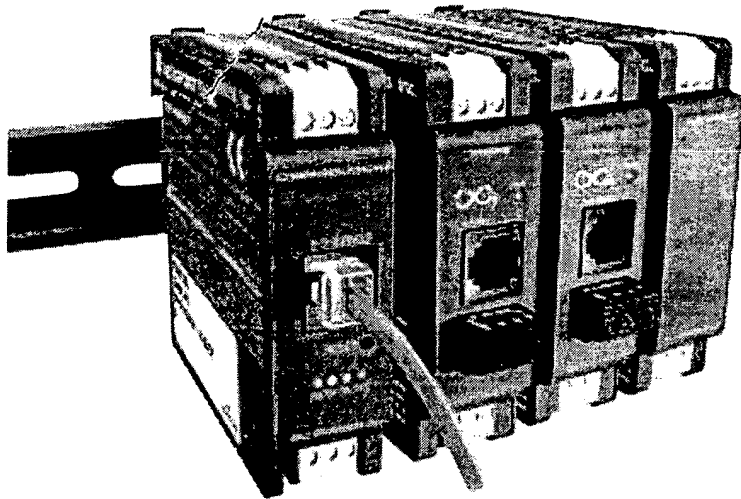
With the NEWPORT iServer: A manufacturing manager can monitor PLC's over the LAN from a desk anywhere in the facility, or from anywhere on the Internet with the proper passwords and authorization. A technician can use a handheld computer with Wireless Ethernet connectivity to change settings on a process controller.

The NEWPORT iServer model # EIS-2 comes complete with full documentation, and firmware.

For OEM's, NEWPORT offers custom labeling as well as customized application specific firmware and design engineering. NEWPORT also offers printed circuit board-level products (powered by 5 Vdc) that OEM's can incorporate in their product to add embedded Ethernet/Internet connectivity to products with existing serial interface. (Contact the NEWPORT OEM Engineering Group.)

For IT and commercial applications, NEWPORT offers other iServer Device Servers in steel enclosures for rack mounting. The EIS-W models feature a DB-9 connector and come complete with a 110 or 240 Vac power adapter.

Industrial MicroServers™



NEWPORT iServer products are designed and manufactured in Santa Ana, California. NEWPORT provides generous technical support.

Specifications

Serial Interface

Interface: Software Selectable RS-232, RS-422 or RS-485 (2 wire)

Connector: screw terminal plugs (EIS-2) RJ45 (EIS-2-RJ)

Data Rates: 300 to 115.2 Kbps

Characters: 7 or 8 data bits

Parity: odd, even, or none

Stop Bits: 1 or 2

Flow Control: Hardware (RTS/CTS) and Software (Xon/Xoff).

The hardware flow control is available only with the EIS-2-RJ model

Digital I/O's: 4 digital input/output lines

Network Interface

Interface: Ethernet 10Base-T

Connector: RJ45

Protocols: TCP/IP, UDP/IP, ARP, ICMP, DHCP, DNS, HTTP, Telnet, and MODBUS/TCP

Indicators (LED's)

Network Activity, Network Link, and Serial Transmit/Receive

Processor

CPU: Enhanced 8051, 22 MHz

Memory: 512 Kbyte Flash, 16 Kbyte SRAM

Management

Embedded Web server, Telnet login, Serial login

Embedded Web Server

Serves dynamic Web pages and Java applets (256 Kbyte capacity)

Power Input - DIN Rail Enclosure

(AC Power supply sold separately)

Input: 10-32 Vdc

Consumption: 2 W max.

Environmental

Operating Temperature: 0 to 70° (32 to 158°F)

Storage Temperature: -40 to 125°C (-40 to 257°F)

Packaging

DIN Rail Enclosure

Material:

Polycarbonate case with DIN Rail mount

Dimensions:

90.2H x 25.1W x 115.0D mm (3.54 x .99 x 4.53 in)

Weight: 113 kg (0.25 lbs.)

Agency Approvals

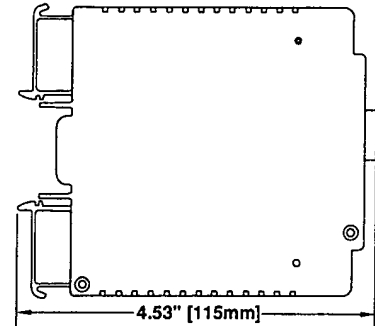
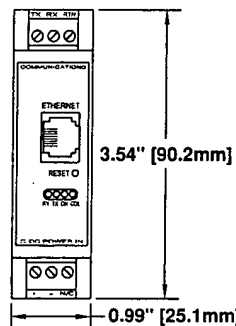
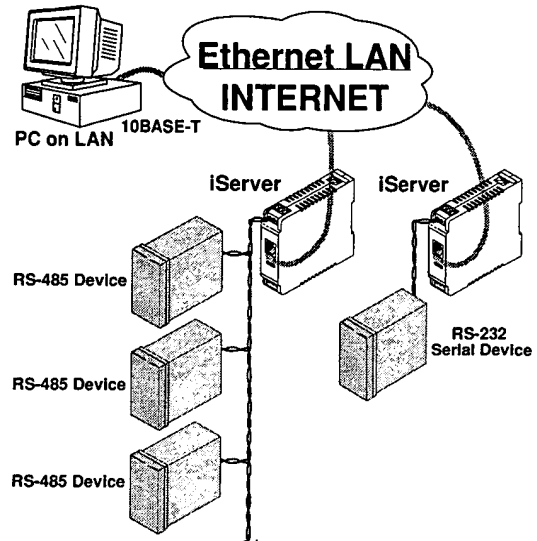
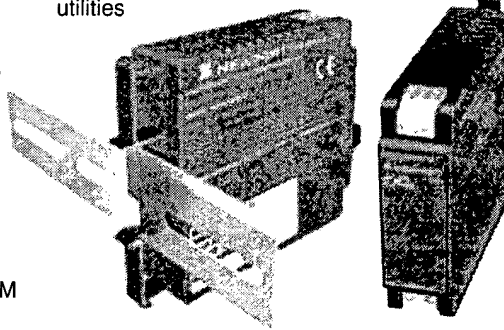
FCC-B, C/UL, CE

Software

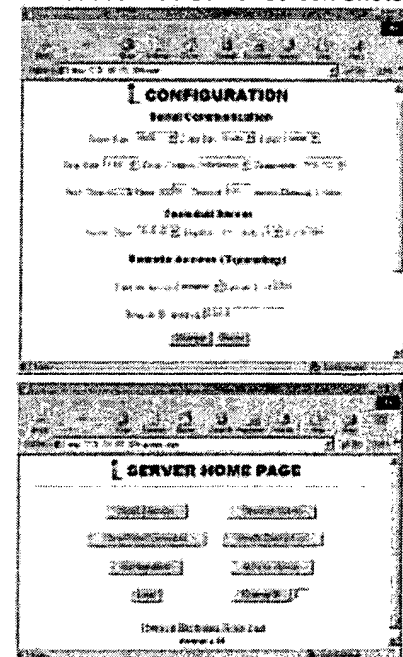
Firmware upgradeable (for iServer firmware upgrade package (EIS-FW-CA and EIS-FW-CD) contact Newport oem@newportUS.com or 714-540-4914)

Compatible with Windows

9x/ME/NT/2000/XP software and related utilities



Embedded Web Server Screen Shots



Ordering Information

MicroServer™: serial interface (RS-232, RS-422, RS-485), 10Base-T/Ethernet, diagnostic LEDs, DIN Rail mountable, CD-ROM with documentation, and printed Quick Start Guide

Model No.	Price*	Description
EIS-2	195	iServer Industrial MicroServer™ with screw terminal serial port
EIS-2-RJ	195	iServer Industrial MicroServer™ with RJ45 serial port
iDRN-PS-1000	150	Power Supply (switching), 95 to 240 Vac input, 24 Vdc output @ 850mA (power up to 7 units)

* Volume discounts are available